BX
e
21

From Bombay to Mogat 27 June 95

BOMBAY GOVERNMENT RECORDS.

IRRIGATION SERIES.—No. VII.

Bx-e-21

MAP & PLANS 2. 4, 5, & D. F, G,

RELATING TO THE

MITROW CANAL

IN THE

EASTERN NARRA DISTRICTS, SIND.

(HTP)

GOD
627.13095
491
Bom/Map
110034

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financial ac
December

110031

EASTERN MARRA DISTRICTS

FROM

JAMBROW to NOWAKOTE

Scale 2 Miles = Inch.

NIGH SANDY TRACT

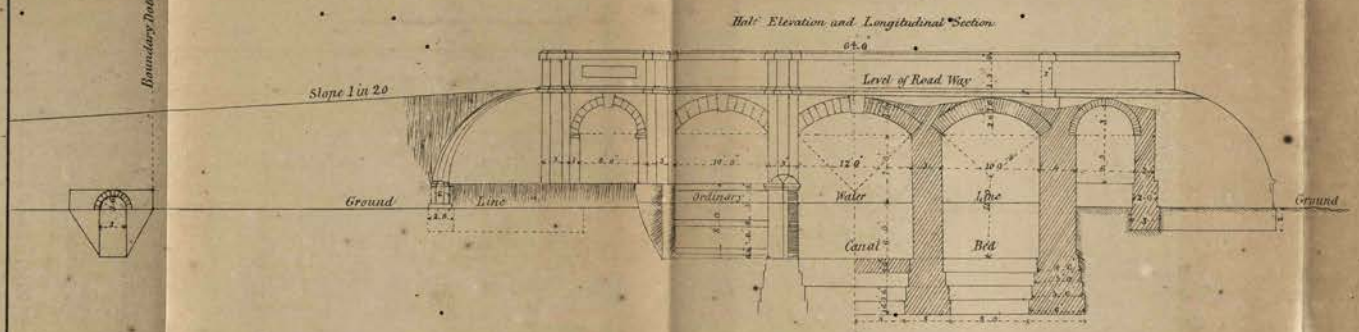
ACCOMPANIMENT TO ESTIMATE N° 19 OF 1866.

SHEET D.

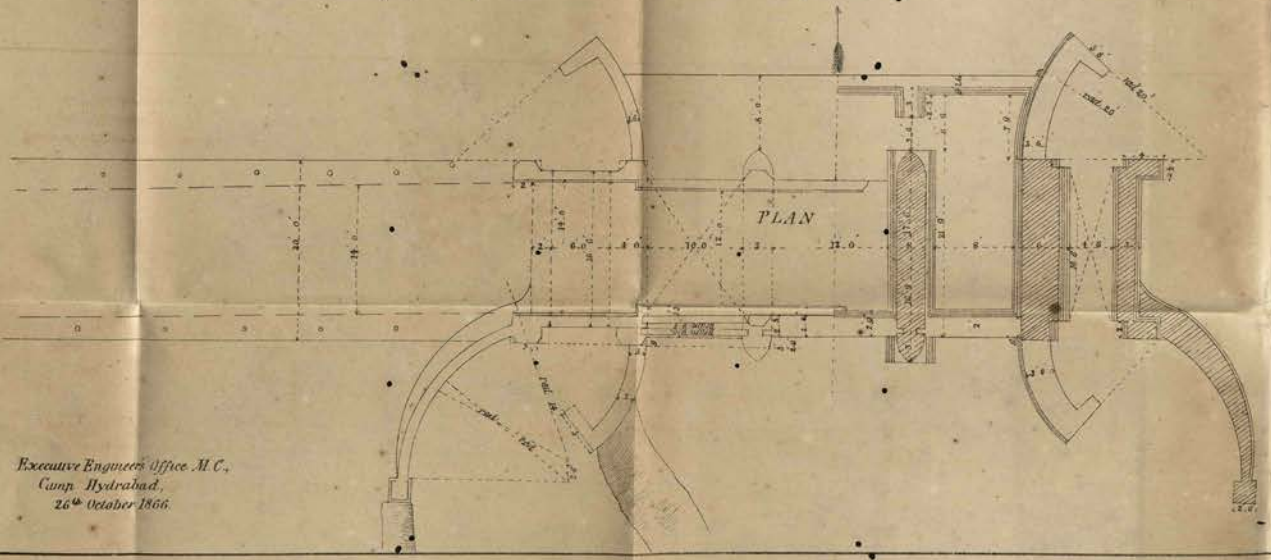
MITROW CANAL

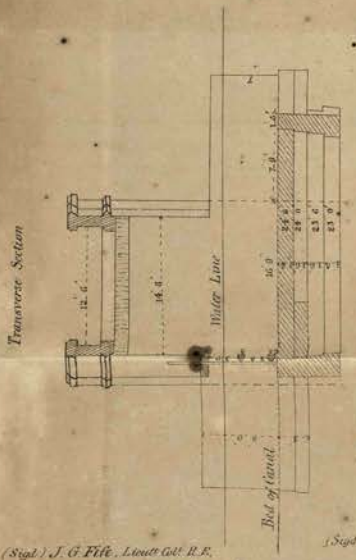
BRIDGE

AT 44th MILE ON OOMERKOTE AND MEERPOOR ROAD.



Scale 10 Feet to an Inch.





Executive Engineers Office M.C.,
Camp Hydrabad,
26th October 1866.

(Sigd) J. G Fife, Lieutt Colt R.E.
Acting Chief Engineer in Sind.

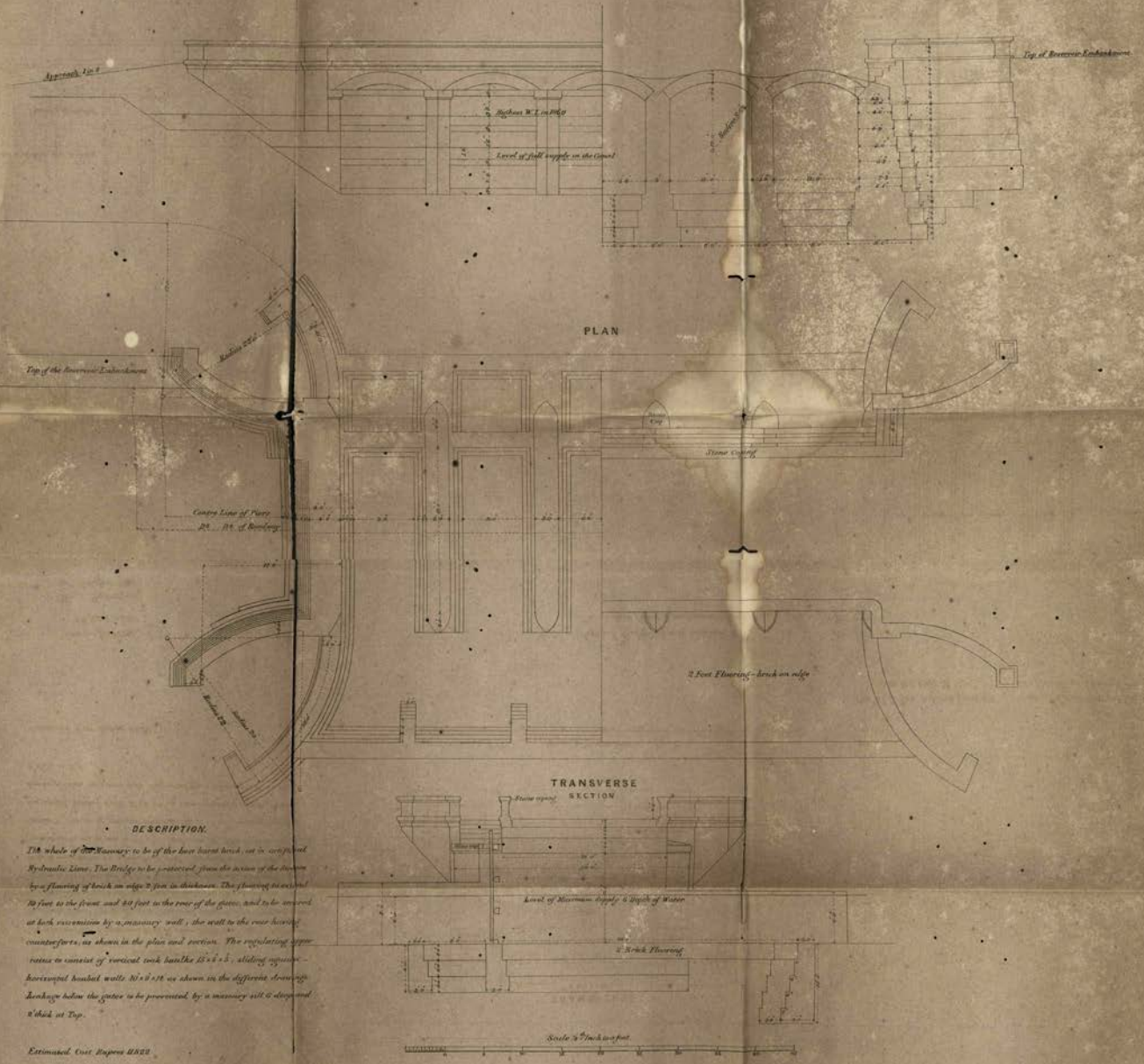
(Sigd) J. D. Cruickshank Lieut R.E.
Acting Executive Engineer M.C.

Arrangement to Estimate № 18 of 1865.

SHEET F.

AMENDED DESIGN FOR REGULATING BRIDGE

MITROW CANAL.


Approach 1in 8
Highest W.L. in 1860
Level of full supply in the Canal
Top of Reservoir Embankment
PLAN
Top of the Reservoir Embankment
Stone Coping
Centre Line of Piers
2ft. Flooring - brick on edge
TRANSVERSE SECTION
Stone coping
Level of Maximum Supply & Depth of Water
2 Brick Flooring
Scale 1/8 Inch to a foot

DESCRIPTION.

The whole of the Masonary to be of the best burnt brick, set in cement of Hydraulic Lime. The Bridge to be protected from the action of the stream by a flooring of brick on edge 2 feet in thickness. The flooring to extend 30 feet to the front and 40 feet to the rear of the gates, and to be secured at both extremities by a masonary wall; the wall to the rear having counterforts, as shown in the plan and section. The regulating apparatus to consist of vertical teak baulks 15 x 8 x 3, sliding against horizontal boulad walls 10 x 8 x 18 as shown in the different drawings. Leakage below the gates to be prevented, by a masonary sill 6 deep and 2 thick at Top.

Estimated Cost Rupees 11822.

(Sigd) J.D. Craikshank, Lieut. R.E.
Actg. Ex. Eng. M. C.

(Sigd) P.L.e. Mesurier, Lieut.
Actg Exec. Engr Lower Narra.

Camp: Bukurr,
5th October 1860.

Camp: Hydrabad,
25th October 1860.

(Sigd) J. G. Fife, Lieut. Colonel, R.E.
Actg Chief Engineer in Sind.

Accompaniment to Estimate No. 20 of 1866

MITROW CANAL BRIDGE

At 30th Mile on Moerpoor to Kipra Road.

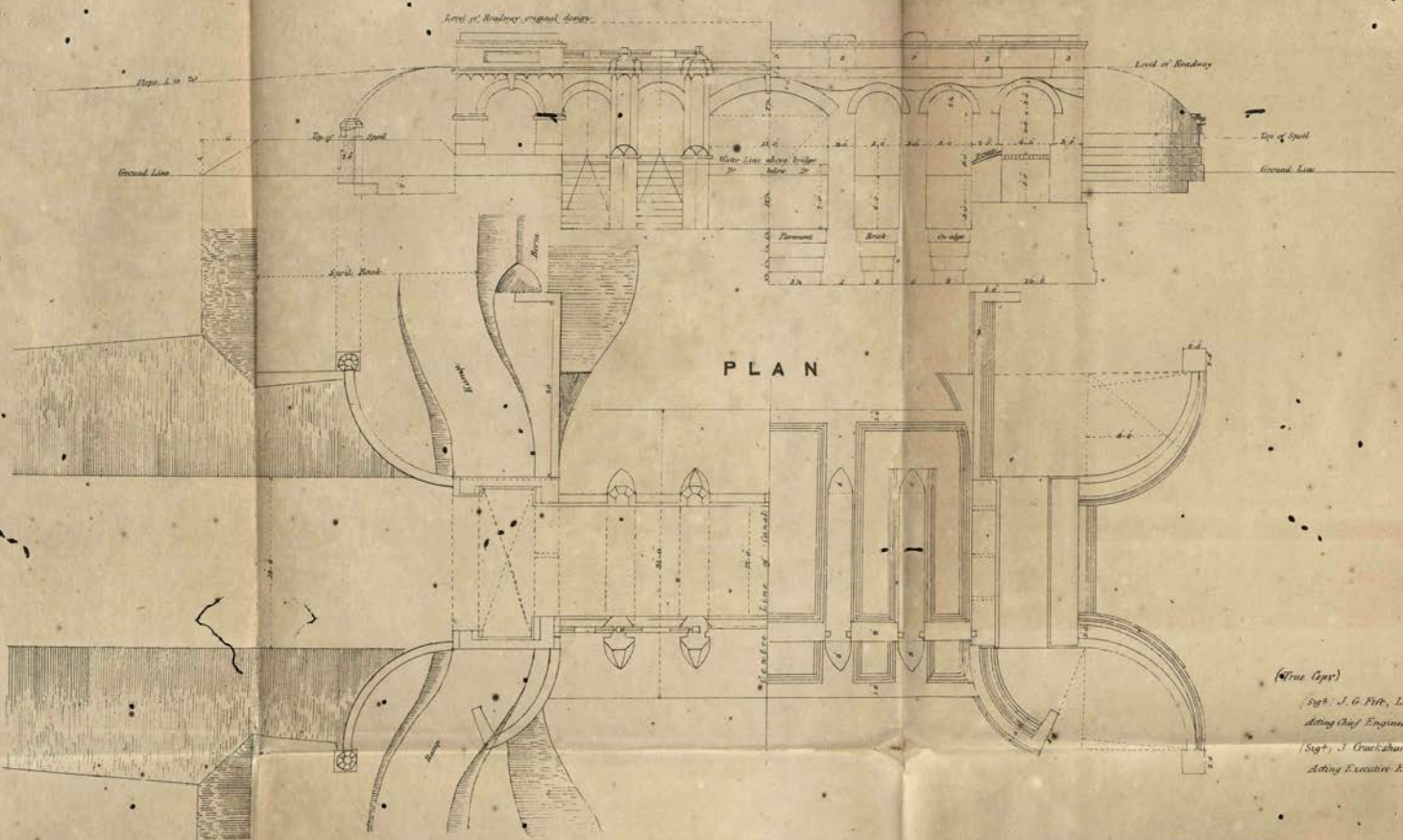
Plan shewing proposed alteration to convert it into a

REGULATING DAM.

Front elevation (up stream) and

Half Longitudinal Section

SHEET G.



(True Copy)

(Sgd) J. G. Fife, Lieut Colonel R.E.
Acting Chief Engineer in Sind.

(Sgd) J. Cruickshank. Lieut R.E.
Acting Executive Engineer M.C.

ACCOMPANIMENT TO ESTIMATE No 19 OF 1866.

SHEET No 2

MITROW CANAL.

PLAN AND SECTIONS

of

MASONRY HEADS to KURRIAHS

Shewing Regulating Apparatus.

Fig. 1

LONGITUDINAL SECTION on A.B.

Level of Water in Canal.

Probable Lowest Waterline in river. drawn

Bed of Canal.

Bank of Kurriah

Spreading and Water Level

Bed of Kurriah

N.B. The dotted lines show the construction to be adopted on the Western Bank, where the heads will also act as Inlets for river water.

Fig. 2

GENERAL PLAN of a SINGLE HEAD.

Fig. 3

FRONT ELEVATION.

Fig. 4

Transverse Section on C.D.

Fig. 5

SIDE ELEVATION.

Fig. 6

PLAN of a DOUBLE HEAD.

Fig. 7, 8 & 9

WINGING PLAN of Regulating Mouthpiece

ELEVATION.

PLAN of Sill.

Scale for Kurriah Heads 8 feet to an Inch.

Fig. 10

GENERAL PLAN of TRIPLE HEAD

PLAN.

Fig. 11

LONGITUDINAL SECTION on A.B.

Fig. 12

SECTION on C.D.

Fig. 13

FRONT ELEVATION.

Fig. 14

SIDE ELEVATION.

Fig. 15.

In the above plans A. B. C. D. E. F. G. H. Mouth to have three Branches

TO SET OUT WORK FIG 15.

Draw A.B. perpendicular to the direction of the Canal on the side of the Canal for the Head of the Cut for the centre of the first Branch C. Draw the line C.D.E. perpendicular to A.B.C. and set off on it on each side the Centre of the centre Branch C. for the centres for the 2nd the Distance of the Centres of the outer Branches from the Centre C. which will then give the lines C.H.G.F. through the centres D.A.G.E. C.B.F. parallel to C.D. at right Angles to A.B. and at 10 ft. C. Drawing G.H.A. with the radius C.E. describe the Arc E.H.F. through the centre C. Draw the lines G.O.A. perpendicular to G.H.A.F. one side of the Canal the centre of the Centre Branch C. the other Branches G.A. and A.F. parallel to G.A. Draw the lines O.P. O.Q. and O.R. parallel to G.O. at distances equal to the Breadth of the Branches and through O. perpendicular to A.B. which will give the Centre Line of the Canal. Make the Breadth of the Canal at Top equal to P.S. and T.V.

Scale for Mouth 2 feet to an Inch

Surveyed by J.G. Fyfe, Sub Lieut. R.E. Acting Qrs of Engineers in Chief

Surveyed by E.J. Smith, Lieutenant, R.E. Acting Executive Engineer Mitrow Canal

Surveyed by John D. Cruickshank, Sub Conductor R.E. Acting Executive Engineer M.C.

Compared by Lieut. Hyde Parker R.E. 2nd Assistant Engineer

Traced by Sub Conductor Cruickshank

1100

Accompaniment to Estimate No. 12 of 1866

SHEET No. 4.

GENERAL DESIGN
FOR
TIMBER BRIDGES
OVER THE
MITROW CANAL.

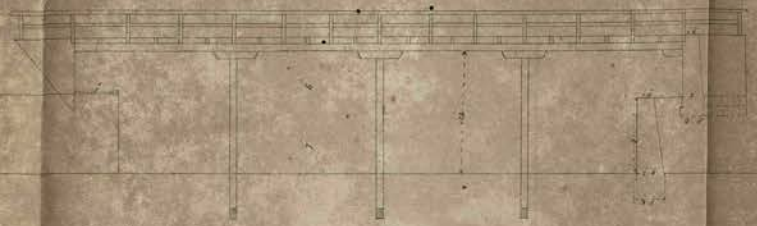
MITROW CANAL.

Plan and Section of Abutments with Water line above the Ground.

Section.

The shaded part Brick and Lime work.

FIG. 1.
ELEVATION.



Scale for Fig. 3, 5 feet to an inch.

Scale for Remaining Fig., 10 feet to one inch.

FIG. 2.
PLAN.

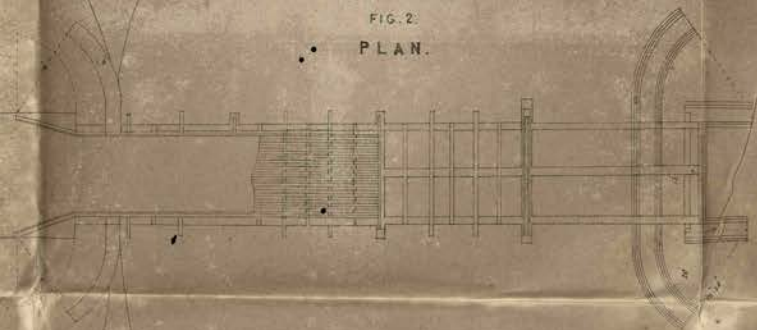
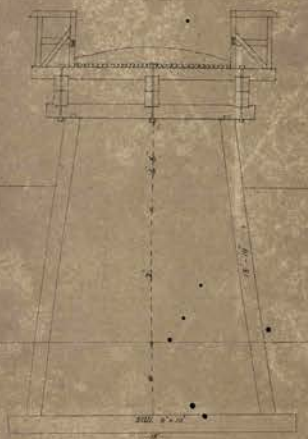


FIG 3.
Transverse Section on



Camp Byculla, 26th October 1866

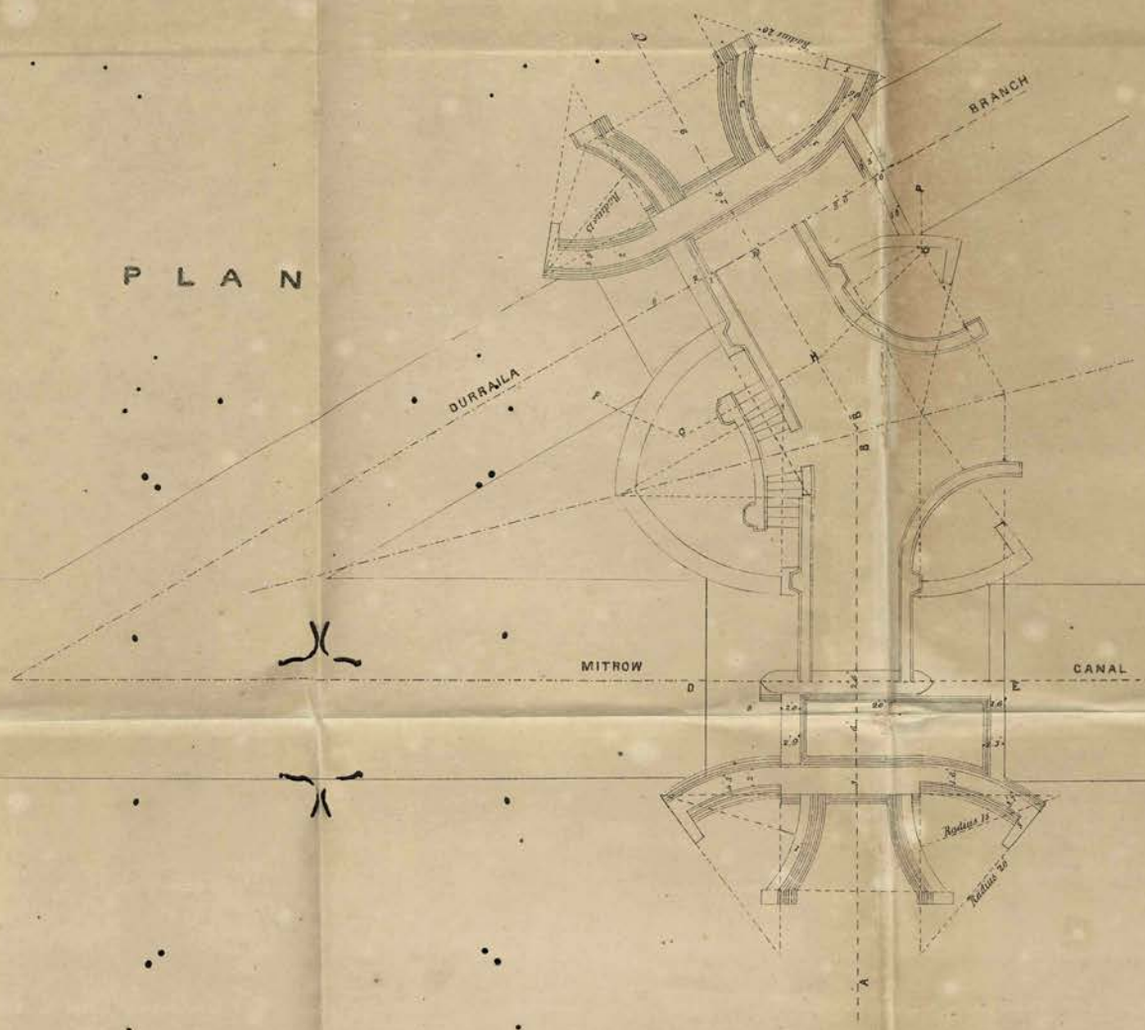
Sd/ J.G. Fitz, Lieut. Colonel R.E.
Acting Chief Engineer, Sind.

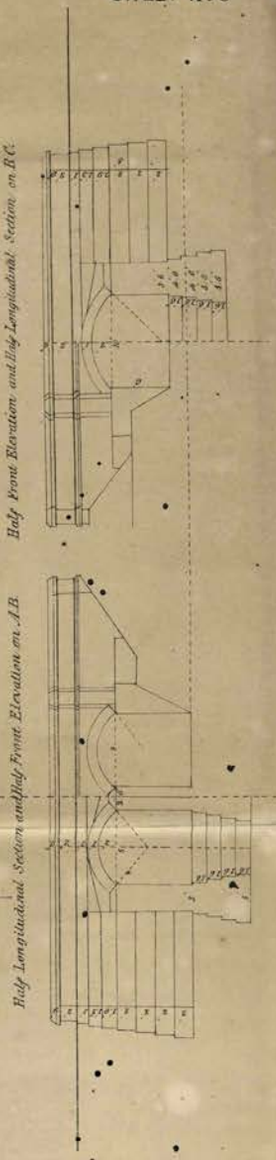
Sd/ J.D. Cruickshanks, Lieut. R.E.
Acting Executive Engineer M.C.

ACCOMP[Y] TO ESTIMATE Nº 19 OF 1866

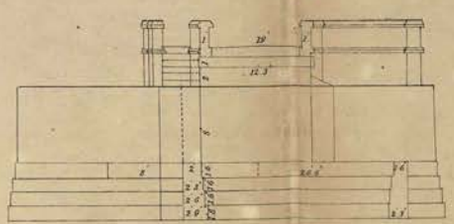
SHEET Nº 3

PLAN





SECTION ON DE.



MITROW CANAL

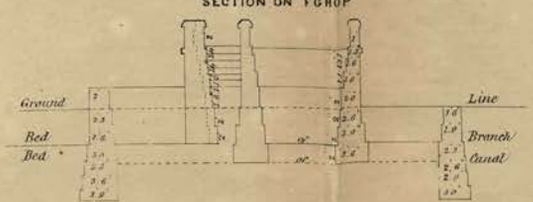
DOUBLE REGULATING BRIDGE

79[th] MILE

HEAD OF DURRAILA BRANCH.

Scale 10 Feet to an Inch.

SECTION ON FGHOP



Office of Executive Engineer M.C.
Camp: Hyderabad.
26th October 1866.

(Sigd) J. G. Fife Lieut. Colonel, R.E.
Acting Chief Engineer in Sind.

(Sigd) J.D. Cruickshank, Lieut, R.E.
Acting Executive Engineer M.C.

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